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8:Ei Compendex(R) 1970-2003/May W1
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? ds
                Description
Set
        Items
                MESSAGE? ? OR EMAIL OR ELECTRONIC() MAIL OR SIGNAL? ?
S1
      2272420
                S1(5N)(TRANSMIT? OR TRANSMISSION OR SEND? OR SENT OR COMMU-
       410765
S2
             NICAT? OR TRANSFER? OR CONVEY? OR PROVID? OR GIV??? OR DELIVE-
             R? OR SUPPLIE? ? OR SUPPLY??? OR GENERAT? OR CREAT? OR PRODUC?
              OR CONSTRUCT? OR FORM??? OR FORMATION OR PREPAR?)
                CLIENT? ? OR NODE? ? OR PC? ? OR COMPUTER? ? OR WORKSTATIO-
S3
      5305597
             N? ? OR WORK()STATION? ? OR TERMINAL? ?
                CONNECTION (5W) OPEN OR SESSION? ? (5N) ACTIVE
S4
          859
                 (STATE OR STATUS) (5W) S3 OR S3(2W) (STATE OR STATUS)
S5
        30997
                 (S3 OR NETWORK) (3W) CONNECTED OR (ACTIVE OR AVAILABL?) (5N) S3
S6
        54293
                 (SECOND? OR 2ND OR REMOTE OR TARGET OR DESTINATION OR DIFF-
S7
       192361
             ERENT OR SEPARATE OR ANOTHER OR OTHER) (3W) S3 OR SERVER
                HEARTBEAT OR CONTROL() MESSAGE? ?
S8
        19217
S9
        18722
                S3(5N)S2
         1095
                S9(20N)S7
S10
           75
                S9 AND S10 AND S4:S6
S11
                S11 NOT PY=1999:2003
S12
           55
            0
                S8 AND S12
S13
            9
                S9 AND S4:S6 AND S8
S14
            8
                RD (unique items)
S15
?
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(Item 1 from file: 8) 15/5/1 DIALOG(R) File 8:Ei Compendex(R)

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E.I. No: EIP99124950567 05444638

Title: New proposal for RSVP refreshes

Author: Wang, Lan; Terzis, Andreas; Zhang, Lixia

Corporate Source: Univ of California, Los Angeles, Los Angeles, CA, USA Conference Title: Proceedings of the 1999 7th International Conference on Network Protocols (ICNP'99)

Conference Location: Toronto, Can Conference Date: 19991031-19991103

Sponsor: IEEE Computer Society E.I. Conference No.: 56111

Source: International Conference on Network Protocols 1999. p 163-172

Publication Year: 1999

CODEN: 85QDAI Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review)

Journal Announcement: 0002W1

Abstract: As a soft-state protocol, RSVP specifies that each RSVP node sends periodic control messages to maintain the state for active RSVP sessions . The protocol overhead due to such periodic messages grows linearly with the number of RSVP sessions. One may reduce the overhead by using a longer refresh period, which unfortunately leads to longer delays in re-synchronizing RSVP state. In this paper we introduce a novel 'state-compression' approach to reducing the overhead of periodic refreshes. Instead of per session refresh messages , an RSVP node periodically to each of its neighbor node a Digest message that contains a compressed version of the entire RSVP state shared with that particular neighbor. In order to speed up state synchronization in face of message losses we also enhance RSVP with an acknowledgment mechanism. Our mechanisms achieve a constant message transmission overhead and low delay while retaining the soft-state nature of the RSVP protocol. (Author abstract) 8 Refs.

Descriptors: \*Network protocols; Signal processing; Internet Identifiers: Resource reservation protocol

Classification Codes:

716.1 (Information & Communication Theory)

723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment)

(COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

15/5/2 (Item 2 from file: 8) DIALOG(R) File 8:Ei Compendex(R)

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E.I. Monthly No: EI8311091299 E.I. Yearly No: EI83000750 Title: COMPUTER CONTROLLED VACUUM CONTROL SYSTEM FOR SYNCHROTRON RADIATION BEAM LINES.

Author: Goldberg, S. M.; Yang, J.; Wang, C.

Corporate Source: Stanford Synchrotron Radiation Lab, Stanford, Calif, USA

IEEE Transactions on Nuclear Science v NS-30 n 4 Pt 1 Aug 1983, Part Accel Conf Accel Eng and Technol, Santa Fe, NM, USA, Mar 21-23 1983 p

Publication Year: 1983

ISSN: 0018-9499 CODEN: IETNAE

Language: ENGLISH

Journal Announcement: 8311

Abstract: The increasing number and complexity of vacuum control systems

at the Stanford Synchrotron Radiation Laboratory has resulted in the need to computerize its operations in order to lower costs and increase efficiency of operation. Status signals are transmitted through digital and analog serial data links which use microprocessors to monitor vacuum status continuously. Each microprocessor has a unique address and up to 256 can be connected to the host computer over a single RS232 data line. A FORTRAN program on the host computer will request status messages and send control messages via only one RS232 line per beam line, signal the operator when a fault condition occurs, take automatic corrective actions, warn of impending valve failure, and keep a running log of all changes in vacuum status for later recall. 2 refs.

Descriptors: \*ACCELERATORS, SYNCHROTRON--\*Control Systems; COMPUTERS--Applications

Classification Codes:

932 (High Energy, Nuclear & Plasma Physics); 732 (Control Devices); 723 (Computer Software)

93 (ENGINEERING PHYSICS); 73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

## 15/5/3 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01852741 ORDER NO: AADAA-I1406108

Multicast routing protocol with partial flooding for ad hoc wireless networks

Author: Barnawi, Abdulaziz Yagoub

Degree: M.S. Year: 2001

Corporate Source/Institution: King Fahd University of Petroleum and

Minerals (Saudi Arabia) (1088)

Source: VOLUME 40/02 of MASTERS ABSTRACTS.

PAGE 482. 83 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544 ISBN: 0-493-36464-1

Ad hoc networks are dynamically reconfigurable wireless networks with no fixed infrastructure or central administration. Applications such as disaster recovery, crowd control, etc., are practical applications for these networks. Such applications are group oriented in nature with high QoS demands, which means an efficient multicast routing protocol is very important. Multicast routing protocols for wired networks are not suitable in this environment, since ad hoc networks consist of severely limited bandwidth links and low power hand held devices. In this work we are proposing a new approach for multicast routing in mobile ad hoc networks. The scheme follows the on-demand forwarding group approach, and occasionally utilizes limited flooding. It utilizes global control sent by the source node to refresh the multicast group members and route information, as well as local beacon messages sent by all forwarding nodes to determine the current mobility state0 of their downstream nodes . These beacon messages are used by forwarding nodes to detect when downstream nodes move out of their transmission range, and therefore switch to scoped flooding.

## 15/5/4 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

INSPEC Abstract Number: B2000-04-6150M-107, C2000-04-5640-067 Title: A new proposal for RSVP refreshes Author(s): Lan Wang; Terzis, A.; Lixia Zhang Author Affiliation: Dept. of Comput. Sci., California Univ., Los Angeles, CA, USA Conference Title: Proceedings Seventh International Conference on Network Protocols (ICNP'99) p.163-72 Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA Publication Date: 1999 Country of Publication: USA xiii+345 pp.Material Identity Number: XX-1999-03051 ISBN: 0 7695 0412 4 U.S. Copyright Clearance Center Code: 0 7695 0412 4/99/\$10.00 Conference Title: Proceedings of ICNP'99: 7th International Conference on Network Protocols Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Distributed Process Conference Date: 31 Oct.-3 Nov. 1999 Conference Location: Toronto, Ont., Canada Document Type: Conference Paper (PA) Language: English Treatment: Applications (A); New Developments (N); Practical Theoretical (T) Abstract: As a soft-state protocol, RSVP specifies that each RSVP node messages to maintain the state for active sends periodic control RSVP sessions . The protocol overhead due to such periodic messages grows linearly with the number of RSVP sessions. One may reduce the overhead by using a longer refresh period, which unfortunately leads to longer delays in re-synchronizing RSVP state. In this paper we introduce a novel to reducing the overhead of periodic "state-compression" approach refreshes. Instead of per session refresh **messages** , an RSVP **node** periodically to each of its neighbor node a digest message that contains a compressed version of the entire RSVP state shared with that particular neighbor. In order to speed up state synchronization in face of message we also enhance RSVP with an acknowledgment mechanism. Our mechanisms achieve a constant message transmission overhead and low delay while retaining the soft-state nature of the RSVP protocol. Subfile: B C Descriptors: delays; Internet; protocols; synchronisation Identifiers: RSVP refreshes; soft-state protocol; periodic control messages; active RSVP sessions; RSVP node; protocol overhead reduction ; refresh period; delays; re-synchronization; state-compression; digest message; RSVP state; state synchronization; message losses; acknowledgment mechanism; constant message transmission overhead; low delay; RSVP protocol ; Internet Class Codes: B6150M (Protocols); B6210L (Computer communications); C5640 (Protocols); C5620W (Other computer networks); C7210N (Information networks Copyright 2000, IEE (Item 2 from file: 2) 15/5/5 DIALOG(R)File 2: INSPEC (c) 2003 Institution of Electrical Engineers. All rts. reserv. INSPEC Abstract Number: B9307-6150P-009, C9307-4230D-002 4426795 Title: A route status reporting method in a computer network Author(s): Miyazaki, S.; Terada, M.; Kohyama, S.; Kawatobi, T. Author Affiliation: Hitachi Ltd., Tokyo, Japan Journal: Transactions of the Information Processing Society of Japan p.1423-30 vol.33, no.11 Publication Date: 1992 Country of Publication: Japan

CODEN: JSGRD5 ISSN: 0387-5806

Language: Japanese Document Type: Journal Paper (JP)

Treatment: Practical (P); Theoretical (T)

Abstract: Discusses finite state machines for the proposed method (for sending or receiving control messages and for an end nodes intermediate node ); control messages for the proposed methods; inputs, actions and states of the finite state machines; actions in the proposed method and in the stateless method (when all links are deactivated, and when individual links are activated); a route model for one direction; a reachability graph when a route model consists of two end nodes (for the cases where activation and deactivation occur, and where no successive activation and deactivation occur); and a reachability graph when a route model consists of two end nodes and n intermediate nodes. Refs)

Subfile: B C

Descriptors: computer networks; finite state machines; telecommunication network routing

Identifiers: link activation; link deactivation; route status reporting method; computer network; finite state machines; end nodes; control messages; intermediate node; stateless method; route model; reachability graph

Class Codes: B6150P (Network design and planning); B6210L (Computer communications); C4230D (Sequential switching theory); C4220 (Automata theory); C5620 (Computer networks and techniques)

## 15/5/6 (Item 3 from file: 2)

DIALOG(R) File 2: INSPEC

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02018863 INSPEC Abstract Number: B83020319, C83013591

Title: A level 3 signaling architecture for ISDN subscriber access

Author(s): Leth, J.W.; White, P.E.

Author Affiliation: Bell Labs., Naperville, IL, USA

Conference Title: GLOBECOM '82. IEEE Global Telecommunications Conference p.762-5 vol.2

Publisher: IEEE, New York, NY, USA

Publication Date: 1982 Country of Publication: USA 3 vol. xxi+1383 pp.

U.S. Copyright Clearance Center Code: CH1819-2/82-0000-0762\$00.75

Conference Sponsor: IEEE

Conference Date: 29 Nov.-2 Dec. 1982 Conference Location: Miami, FL, USA

Language: English Document Type: Conference Paper (PA)

Treatment: General, Review (G)

Abstract: The architectural requirements for establishing the standard ISDN signaling protocol at level 3 are reviewed. These requirements include the need to support signaling procedures that can interwork with existing standards, such as POTS and X.25; support for a wide range of terminal capabilities; support for many different call configurations; and extensibility to accommodate evolving technology. An approach to a level 3 signaling architecture is then derived from these requirements. This 3 signaling divides the level into call management, administrative, and maintenance messages. The call management messages are further classified into functional messages (implementing the call setup, clearing, and control functions), status **messages** (providing extended call progress and **terminal status** information), and error **control** messages . A subset of the call management messages (those used to set up and clear simple calls) forms a core message set that could be implemented by all ISDN terminals and exchanges. More 'intelligent' terminals could set

up and control complex call configurations through the use of optional parameters and additional messages. (4 Refs)

Subfile: B C

Descriptors: communication networks; digital communication systems; protocols; signalling (telecommunication networks)

Identifiers: CCITT study groups; D-channel protocol; level 3 signaling architecture; subscriber access; standard ISDN signaling protocol; POTS; X.25; terminal capabilities; call configurations; call management; administrative; maintenance messages; functional messages; status messages; error control messages; core message; ISDN terminals; exchanges Class Codes: B6210L (Computer communications); B6210M (ISDN); B6230F (Integrated switching and transmission systems); C5600 (Data communication equipment and techniques)

15/5/7 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
(c) 2003 Japan Science and Tech Corp(JST). All rts. reserv.

01245995 JICST ACCESSION NUMBER: 91A0486396 FILE SEGMENT: JICST-E A study of multicast without time constraint on hierarchical network. HIRATA TOSHIAKI (1); KONDO TAKESHI (1); YAGYU KAZUO (1); MINEO AKIRA (2) (1) Hitachi, Ltd., System Development Lab.; (2) Hitachi, Ltd. Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report

(Institute of Electronics, Information and Communication Enginners),

1991, VOL.91, NO.11(IN91 1-5), PAGE.1-6, FIG.10, REF.7

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.395.49

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

ABSTRACT: This paper discusses a multicast method that **deliver messages** to specified **nodes** without time and commitment costraints on a hierarchical network. In the past, multicast problem was focused on methods to optimize cost or delay time with constraint that all messages reach specified nodes in correct order within a finite time. We propose a multicast method which **deliver messages** to the **node** which failed to receive multicast messages when the **node** becomes available. The proposed multicast method is applicable to delivering control messages for dynamic reconfiguration of network. (author abst.)

DESCRIPTORS: hierarchical structure; communication network; communication control; terminal station; information service; simultaneous transmission; signal synchronization; message transmission

BROADER DESCRIPTORS: structure; information network; network; control; communication station; communication establishment; facility and building; service; communication system; method; signal processing; treatment; synchronization

CLASSIFICATION CODE(S): ND11040A

15/5/8 (Item 1 from file: 95)

DIALOG(R) File 95: TEME-Technology & Management (c) 2003 FIZ TECHNIK. All rts. reserv.

00692013 193068506928

Titel japanisch

(Ein Verfahren, einen Pfad in einem Rechnernetz zu beschreiben) (A route status reporting method in a computer network)

Miyazaki, S; Terada, M; Kohyama, S; Kawatobi, T

Hitachi Ltd., Tokyo, Japan

Transactions of Information Processing Society of Japan, v33, n11,

pp1423-1430, 1992

Document type: journal article Language: Japanese

Record type: Abstract

## ABSTRACT:

Discusses finite state machines for the proposed method (for end nodes sending or receiving control messages and for an intermediate node); control messages for the proposed methods; inputs, actions and states of the finite state machines; actions in the proposed method and in the stateless method (when all links are deactivated, and when individual links are activated); a route model for one direction; a reachability graph when a route model consists of two end nodes (for the cases where activation and deactivation occur, and where no successive activation and deactivation occur); and a reachability graph when a route model consists of two end nodes and n intermediate nodes.

DESCRIPTORS: COMPUTER NETWORKS; ABSTRACT AUTOMATON; NETWORK ARCHITECTURE; DIRECTED GRAPHS; SWITCHING TECHNOLOGY; FINITE AUTOMATA; NETWORK ROUTING IDENTIFIERS: LINK ACTIVATION; LINK DEACTIVATION; ROUTE STATUS REPORTING METHOD; END NODES; CONTROL MESSAGES; INTERMEDIATE NODE; STATELESS METHOD; ROUTE MODEL; REACHABILITY GRAPH; Rechnernetz; Automat; Graph